INDEX

A

Air Infiltration through Revolving Doors, by L. F. Schutrum, N. Ozisik, C. M. Humphreys and J. T. Baker 488
Discussion 505
Albright, L. F. and Allen Thieme, Solubility of Refrigerants 11, 12 and 22 in Organic Solvents Containing a Nitrogen Atom and in Mixtures of Liquids 431
Anderson, D. B., G. A. Erickson, R. C. Jordan and R. R. Leonard, Field Laboratory for Heating Studies 154
ASHRAE Semiannual Meeting, 1961, (Chicago, Illinois) 64
ASHRAE Sixty-eighth Annual Meeting, 1961, (Denver, Colorado) 330
ASHRAE-ASME Joint Meeting, 1961, (New York, N. Y.) 603

B

Baker, J. T., L. F. Schutrum, N. Ozisik and C. M. Humphreys, Air Infiltration through Revolving Doors 488
Blum, H. A. and T. M. Olcott, Thermodynamic Investigation of a Refrigerant Expansion Engine 360
Brouha, Lucien, Physiological Reactions to Psychrometric Extremes 622
Brown, E. J. and J. R. Wright, Calculated Temperature Rise in Round Ducts 542
Brown, W. P., K. R. Solvason and A. G. Wilson, Unique Hot-Box Cold-Room Facility 561
Bryan, W. L., Heat and Mass Transfer in Dehumidifying Surface Coils 393
Bushouse, C. J., Degradation of Polyester Film When Used as Additives in Refrigeration Systems 422

C

Calculated Temperature Rise in Round Ducts, by J. R. Wright and E. J. Brown 542
Discussion 560
Chapman, D. D. and R. C. McHarness, Refrigerating Capacity and Performance Data for Various Refrigerants, Azeotropes and Mixtures 441
Chimney Draft, Influence of the House on, by A. G. Wilson 317
Combustion-Driven Pulsations in Oil-Fired Residential Heating Equipment, by A. A. Putnam and C. F. Speich 273
Discussion 286
Congress, A. E., Integrated Load Technique for Estimating Annual Energy Use of Central Air Conditioning Plants 578
Corrosion Inhibition on Steel Tubes in Low-Pressure Steam Boilers, by W. A. Keilbaugh and F. J. Pocock 73
Discussion 98
Cramer, R. D. and L. W. Neubauer, Thermal Effects of Floor Construction .. 214
Cross-Flow Cooling Tower, Graphical Analysis of, by Hideo Uchida 267
Crow, L. W., Evaluation of Wet-Bulb Data for Cooling Equipment Design .. 228

D

Daily Insolation on Surfaces Tilted toward the Equator, by B. Y. H. Liu and R. C. Jordan 526
Discussion 541

Degradation of Polyester Film When Used as Additives in Refrigeration Systems, by C. J. BUSHOUSE 422
Discussion 429
Dehumidifying Surface Coils, Heat and Mass Transfer in, by W. L. BRYAN 393
Design of Wet Cell Air Humidifiers, by M. W. FIRST 99
Discussion 116
Discussion of Some Strength Characteristics of Ice at the Interface, by J. K. STENE and W. E. FONTAINE 379
Discussion 391
DODERER, G. C. and H. O. SPAUSCHUS, Reaction of Refrigerant 12 with Petroleum Oils 237
Domed Skylights, Solar Heat Gains through, by L. F. SCHUTRUM and N. OZISIK 465

E

Effect of Climatic Factors on Human Disease, by J. L. HOLLANDER 636
ERICKSON, G. A., D. B. ANDERSON, R. C. JORDAN and R. R. LEONARD, Field Laboratory for Heating Studies 154
Estimating Annual Energy Use of Central Air Conditioning Plants, Integrated Load Technique for, by A. E. CONGRESS 578
Evaluation of Wet-Bulb Data for Cooling Equipment Design, by L. W. CROW 228
Discussion 236
Evaluation Procedure for Odor-Control Methods, by W. F. KERKA 507
Discussion 525

F

Field Laboratory for Heating Studies, by D. B. ANDERSON, G. A. ERICKSON, R. C. JORDAN and R. R. LEONARD 154
Discussion 168
Finned Tube Exchangers, Flow and Heat Exchange Characteristics of, by B. GEBHART 133
FIRST, M. W., Design of Wet Cell Air Humidifiers 99
Flow and Heat Exchange Characteristics of Finned Tube Exchangers, by B. GEBHART 133
Discussion 151
Fluid Flow through Flexible Orifices, a Study of, by R. D. ULRICH, W. E. FONTAINE and O. W. WITZELL 406
FONTAINE, W. E., R. D. ULRICH and O. W. WITZELL, A Study of Fluid Flow through Flexible Orifices 406
FONTAINE W. E. and J. K. STENE, Discussion of Some Strength Characteristics of Ice at the Interface 379

G

GEBHART, B., Flow and Heat Exchange Characteristics of Finned Tube Exchangers 133
Graphical Analysis of a Cross-Flow Cooling Tower, by HIDEO UCHIDA 267

H

Heat and Mass Transfer in Dehumidifying Surface Coils, by W. L. BRYAN 393
Discussion 403
Heat Exchangers, Metastable State of Water in Relation to, by B. H. JENNINGS 118

Heat Transfer through Mineral Wool Insulation in Combination with Reflective Surfaces, by C. E. LUND and R. M. LANDER 185
Discussion 210
Heating Studies, Field Laboratory for, by D. B. ANDERSON, G. A. ERICKSON, R. C. JORDAN and R. R. LEONARD 154
HOLLANDER, J. L., Effect of Climatic Factors on Human Disease 636
Hot-Box Cold-Room Facility, Unique, by W. P. BROWN, K. R. SOLVASON and A. G. WILSON 561
HUMPHREYS, C. M., L. F. SCHUTRUM, N. OZISIK and J. T. BAKER, Air Infiltration through Revolving Doors 488

I

In Memoriam 653
Influence of the House on Chimney Draft, by A. G. WILSON 317
Discussion 329
Insolation on Surfaces Tilted toward the Equator, Daily, by B. Y. H. LIU and R. C. JORDAN 526
Integrated Load Technique for Estimating Annual Energy Use of Central Air Conditioning Plants, by A. E. CONGRESS 578
Discussion 601

J

JENNINGS, B. H., Metastable State of Water in Relation to Heat Exchangers .. 118
JORDAN, R. C. and B. Y. H. LIU, Daily Insolation on Surfaces Tilted toward the Equator 526
JORDAN, R. C., D. B. ANDERSON, G. A. ERICKSON and R. R. LEONARD, Field Laboratory for Heating Studies 154

K

KEILBAUGH, W. A. and F. J. POCOCK, Corrosion Inhibition on Steel Tubes in Low-Pressure Steam Boilers 73
KERKA, W. F., Evaluation Procedure for Odor-Control Methods 507

L

LANDER, R. M. and C. E. LUND, Heat Transfer through Mineral Wool Insulation in Combination with Reflective Surfaces 185
LEONARD, R. R., D. B. ANDERSON, G. A. ERICKSON and R. C. JORDAN, Field Laboratory for Heating Studies 154
LIU, B. Y. H. and R. C. JORDAN, Daily Insolation on Surfaces Tilted toward the Equator 526
LUND, C. E. and R. M. LANDER, Heat Transfer through Mineral Wool Insulation in Combination with Reflective Surfaces 185

M

MARK, MELVIN and M. E. STEPHENSON, JR., Thermal Conductivity of Porous Materials 170
MCHARNESS, R. C. and D. D. CHAPMAN, Refrigerating Capacity and Performance Data for Various Refrigerants, Azeotropes and Mixtures 441

Metastable State of Water in Relation to Heat Exchangers, by BURGESS H. JENNINGS 118
Discussion 132
Mineral Wool Insulation in Combination with Reflective Surfaces, Heat Transfer through, by C. E. LUND and R. M. LANDER 185

N

NEUBAUER, L. W. and R. D. CRAMER, Thermal Effects of Floor Construction ... 214
NEVINS, R. G., Psychrometrics and Modern Comfort 609
New Development in Steam Vacuum Refrigeration, by ELLIOT SPENCER 339
Discussion 356
Noise Suppression in Oil Burners, by R. W. SAGE and H. F. SCHROEDER 302
Discussion 315

O

Odor-Control Methods, Evaluation Procedure for, by W. F. KERKA 507
Oil Burners, Noise Suppression in, by R. W. SAGE and H. F. SCHROEDER 302
Oil-Fired Residential Heating Equipment, Combustion-Driven Pulsations in, by A. A. PUTNAM and C. F. SPEICH 273
Oil-Fired Residential Heating Equipment, Suppression of Pulsations in, by C. F. SPEICH and A. A. PUTNAM 288
OLCOTT, T. M. and H. A. BLUM, Thermodynamic Investigation of a Refrigerant Expansion Engine 360
OZISIK, N. and L. F. SCHUTRUM, Solar Heat Gains through Domed Skylights.. 485
OZISIK, N., L. F. SCHUTRUM, C. M. HUMPHREYS and J. T. BAKER, Air Infiltration through Revolving Doors 488

P

Physiological Reactions to Psychrometric Extremes, by LUCIEN BROUHA 622
POCOCK, F. J. and W. A. KEILBAUGH, Corrosion Inhibition on Steel Tubes in Low-Pressure Steam Boilers 73
Polyester Film, Degradation of When Used as Additives in Refrigeration Systems, by C. J. BUSHOUSE 422
Psychrometric Charts in Review, by D. D. WILE 646
Psychrometric Extremes, Physiological Reactions to, by LUCIEN BROUHA 622
Psychrometrics and Modern Comfort, by R. G. NEVINS 609
PUTNAM, A. A. and C. F. SPEICH, Combustion-Driven Pulsations in Oil-Fired Residential Heating Equipment 273
PUTNAM, A. A. and C. F. SPEICH, Suppression of Pulsations in Oil-Fired Residential Heating Equipment 288

R

Reaction of Refrigerant 12 with Petroleum Oils, by H. O. SPAUSCHUS and G. C. DODERER 237
Discussion 246
Refrigerating Capacity and Performance Data for Various Refrigerants, Azeotropes and Mixtures, by R. C. MCHARNESS and D. D. CHAPMAN 441
Discussion 463
Refrigeration System Pipelines, Sizing of for Optimum Economy, by D. J. RENWICK 247

Refrigerant Expansion Engine, Thermodynamic Investigation of, by T. M. OLCOTT and H. A. BLUM 360
Refrigerant 12, Reaction of with Petroleum Oils, by H. O. SPAUSCHUS and G. C. DODERER 237
Refrigerants 11, 12 and 22, Solubility of in Organic Solvents Containing a Nitrogen Atom and in Mixtures of Liquids, by ALLEN THIEME and L. F. ALBRIGHT 431
RENWICK, D. J., Sizing of Refrigeration System Pipelines for Optimum Economy 247
Revolving Doors, Air Infiltration through, by L. F. SCHUTRUM, N. OZISIK, C. M. HUMPHREYS and J. T. BAKER 488

S

SAGE, R. W. and H. F. SCHROEDER, Noise Suppression in Oil Burners 302
SCHROEDER, H. F. and R. W. SAGE, Noise Suppression in Oil Burners 302
SCHUTRUM, L. F. and N. OZISIK, Solar Heat Gains through Domed Skylights .. 465
SCHUTRUM, L. F., N. OZISIK, C. M. HUMPHREYS and J. T. BAKER, Air Infiltration through Revolving Doors 488
Sizing of Refrigeration System Pipelines for Optimum Economy, by D. J. RENWICK 247
Discussion 266
Solar Heat Gains through Domed Skylights, by L. F. SCHUTRUM and N. OZISIK 465
Discussion 486
Solubility of Refrigerants 11, 12 and 22 in Organic Solvents Containing a Nitrogen Atom and in Mixture of Liquids, by ALLEN THIEME and L. F. ALBRIGHT 431
Discussion 440
SOLVASON, K. R., W. P. BROWN and A. G. WILSON, Unique Hot-Box Cold-Room Facility 561
SPAUSCHUS, H. O. and G. C. DODERER, Reaction of Refrigerant 12 with Petroleum Oils 237
SPEICH, C. F. and A. A. PUTNAM, Combustion-Driven Pulsations in Oil-Fired Residential Heating Equipment 273
SPEICH, C. F. and A. A. PUTNAM, Suppression of Pulsations in Oil-Fired Residential Heating Equipment 288
SPENCER, ELLIOT, New Development in Steam Vacuum Refrigeration 339
Steam Vacuum Refrigeration, New Development in, by ELLIOT SPENCER 339
STENE, J. K. and W. E. FONTAINE, Discussion of Some Strength Characteristics of Ice at the Interface 379
STEPHENSON, M. E., JR., and MELVIN MARK, Thermal Conductivity of Porous Materials 170
Strength Characteristics of Ice at the Interface, Discussion of Some, by J. K. STENE and W. E. FONTAINE 379
Study of Fluid Flow through Flexible Orifices, by R. D. ULRICH, W. E. FONTAINE and O. W. WITZELL 406
Discussion 421
Suppression of Pulsations in Oil-Fired Residential Heating Equipment, by C. F. SPEICH and A. A. PUTNAM 288
Discussion 300

T

Temperature Rise in Round Ducts, Calculated, by E. J. BROWN and J. R. WRIGHT 542
Thermal Conductivity of Porous Materials, by M. E. STEPHENSON, JR., and MELVIN MARK 170

Thermal Effects of Floor Construction, by R. D. CRAMER and L. W. NEUBAUER 214
Discussion 227
Thermodynamic Investigation of a Refrigerant Expansion Engine, by T. M. OLCOTT and H. A. BLUM 360
Discussion 377
THIEME, ALLEN and L. F. ALBRIGHT, Solubility of Refrigerants 11, 12 and 22 in Organic Solvents Containing a Nitrogen Atom and in Mixtures of Liquids 431

U

UCHIDA, HIDEO, Graphical Analysis of a Cross-Flow Cooling Tower 267
ULRICH, R. D., W. E. FONTAINE and O. W. WITZELL, A Study of Fluid Flow through Flexible Orifices 406
Unique Hot-Box Cold-Room Facility by W. P. BROWN, K. R. SOLVASON and A. G. WILSON 561

W

Wet-Bulb Data, Evaluation of for Cooling Equipment Design, by L. W. CROW 228
Wet Cell Air Humidifiers, Design of, by M. W. FIRST 99
WILE, D. D., Psychrometric Charts in Review 646
WILSON, A. G., W. P. BROWN and K. R. SOLVASON, Unique Hot-Box Cold-Room Facility 561
WILSON, A. G., Influence of the House on Chimney Draft 317
WITZELL, O. W., R. D. ULRICH and W. E. FONTAINE, A Study of Fluid Flow through Flexible Orifices 406
WRIGHT, J. R. and E. J. BROWN, Calculated Temperature Rise in Round Ducts 542